FIG 1

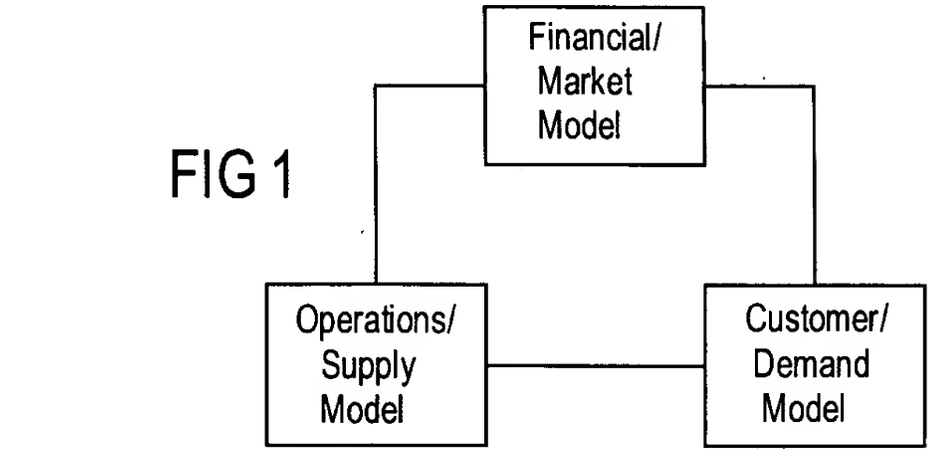
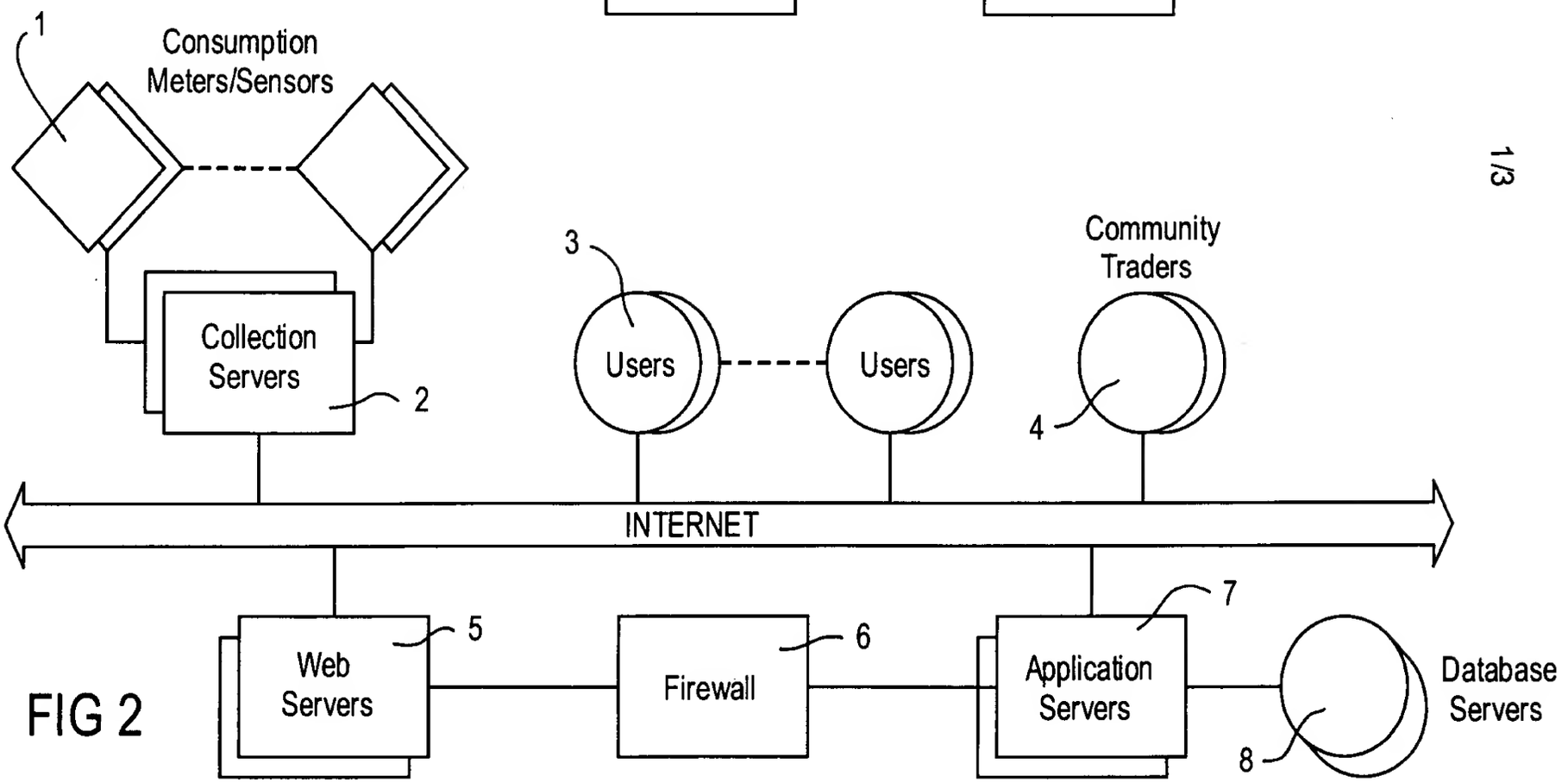

Financial/
Market
Model
Operations/
Supply
Model
Customer/
Demand
Model

FIG 2


1
Consumption
Meters/Sensors
Collection
Servers
2
3
Users
Users
Community
Traders
4
INTERNET
Web
Servers
5
Firewall
6
Application
Servers
7
8
Database
Servers

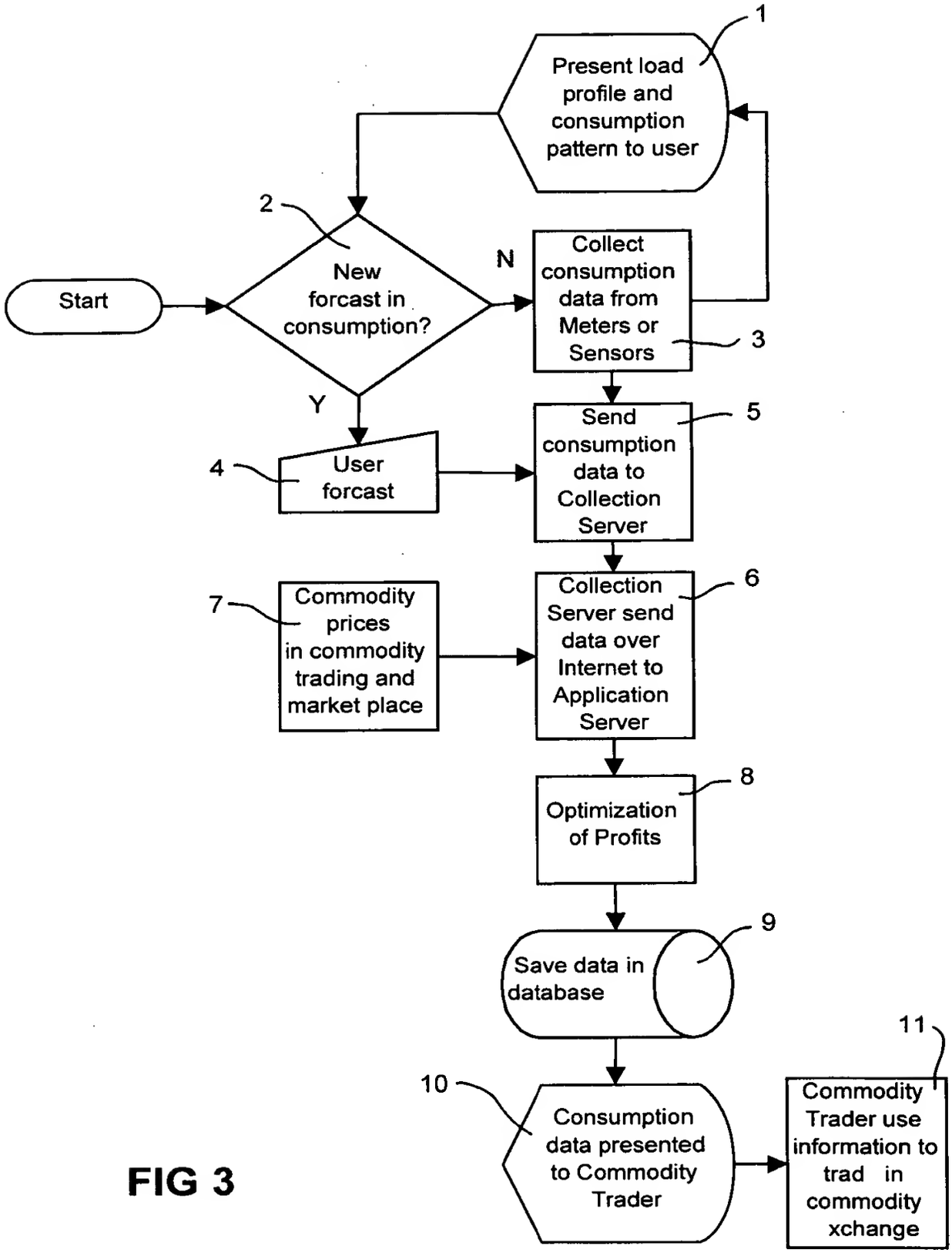
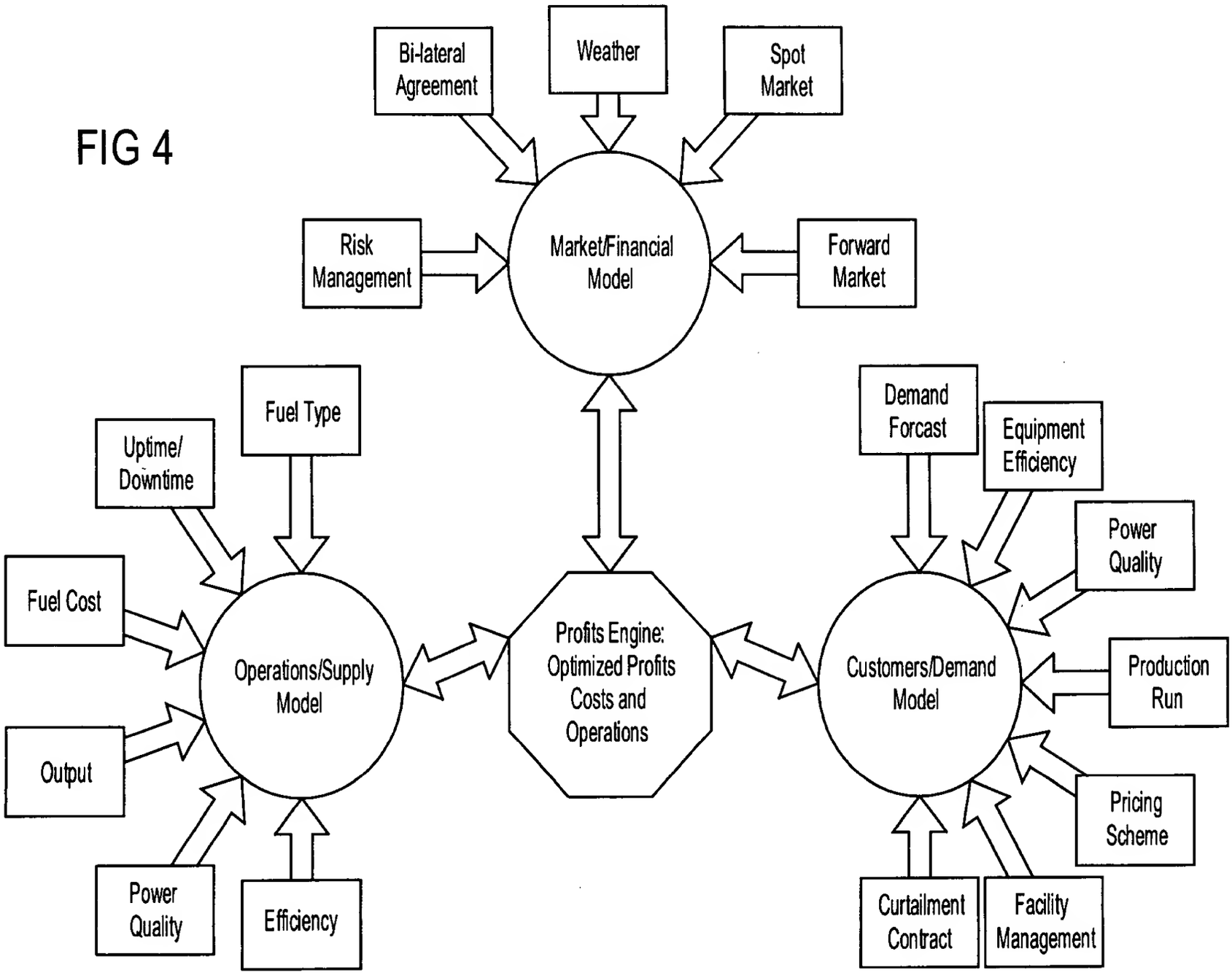

1
Present load profile and consumption pattern to user
2
New forcast in consumption?
Start
N
Y
Collect consumption data from Meters or Sensors
3
Send consumption data to Collection Server
5
User forcast
4
Commodity prices in commodity trading and market place
7
Collection Server send data over Internet to Application Server
6
Optimization of Profits
8
Save data in database
9
Consumption data presented to Commodity Trader
10
Commodity Trader use information to trad in commodity xchange
11

FIG 3

FIG 4


Bi-lateral Agreement
Weather
Spot Market
Risk Management
Market/Financial Model
Forward Market
Fuel Type
Uptime/ Downtime
Fuel Cost
Output
Power Quality
Efficiency
Operations/Supply Model
Profits Engine: Optimized Profits Costs and Operations
Demand Forcast
Equipment Efficiency
Power Quality
Production Run
Pricing Scheme
Customers/Demand Model
Curtailment Contract
Facility Management